

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Stefan Hau-Riege
R. Scott List

Serial No.: 10/001,305

Filed: November 30, 2001

For: METHOD OF MAKING A
SEMICONDUCTOR DEVICE
THAT HAS COPPER DAMASCENE
INTERCONNECTS WITH ENHANCED
ELECTROMIGRATION RELIABILITYCommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Art Unit: 2829

Examiner: M. Harrison

Atty Docket: P12075

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JUL 27 2004

AMENDMENT

Dear Sir:

In response to the office action of July 14, 2004, applicants respectfully request the examiner to enter the following amendment. In the office action, the examiner indicated that the pending claims, as amended, are allowable. Consequently, applicants respectfully request the examiner to allow these remaining pending claims.

Intel Corporation
2200 Mission College Blvd.
Santa Clara, CA 95052

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Intel Legal Team

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Fax

Page 1 of 8

Date: July 27, 2004

To: Monica D. Harrison Fax: 703-872-9306 Phone: 571-272-1959
United States Patent and Trademark Office

From: Mark V. Seeley Fax: 408-765-7723 Phone: 408-765-7382

Subject: Amendment in Application Serial No. 10/001,305

A CONFIRMATION COPY OF THIS DOCUMENT:

WILL NOT BE SENT

Applicant(s): Stefan Hau-Riege, R. Scott List
Assignee: Intel Corporation
Serial No.: 10/001,305
Filed: November 30, 2001
Atty Docket No.: P12075
Title: METHOD OF MAKING A SEMICONDUCTOR DEVICE THAT HAS COPPER
 DAMASCENE INTERCONNECTS WITH ENHANCED
 ELECTROMIGRATION RELIABILITY

Enclosed:

1. Transmittal Form (1 page)
2. Fee Transmittal for FY 2004 (1 page in duplicate)
3. Amendment (4 pages).

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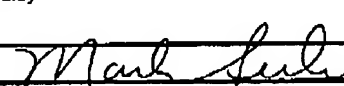
PTO/SB/21 (02-04)

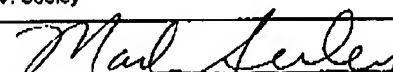
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/001,305	
	Filing Date	November 30, 2001	
	First Named Inventor	Stefan Heu-Riege et al.	
	Art Unit	2829	
	Examiner Name	M. Harrison	
Total Number of Pages In This Submission	7	Attorney Docket Number	P12075

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input checked="" type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	<input type="checkbox"/> Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Mark V. Seeley
Signature	
Date	July 27, 2004

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.	
Typed or printed name	Mark V. Seeley
Signature	
Date	July 27, 2004

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PTO/SB/17 (10-03)

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FEE TRANSMITTAL
for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 0.00**Complete If Known**

Application Number	10/001,305
Filing Date	November 30, 2001
First Named Inventor	Stefan Hau-Riege et al.
Examiner Name	M. Harrison
Art Unit	2829
Attorney Docket No.	P12075

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number	50-0221
Deposit Account Name	Intel Corporation

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	305	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	386	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
4	-20** = 0	18	0
1	-3** = 0	86	0
			290

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	146	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	66	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	65	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	65	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	840	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1808	180	1808	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (Times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00**SUBMITTED BY**

Name (Print/Type)	Mark V. Seeley	Registration No. (Attorney/Agent)	50,804	Telephone	408-765-7382
Signature	<i>Mark Seeley</i>	Date	July 27, 2004		

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PTO/SB/17 (10-03)

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Examiner Name	M. Harrison
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Attorney Docket No.	P12075

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

50-0221

Intel Corporation.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 355	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
4	20** = 0	X 18	= 0
1	3** = 0	X 85	= 0
		290	= 0

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2206 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

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1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1610 770	2810 385	For each additional invention to be examined (37 CFR 1.128(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00**SUBMITTED BY**

Name (Print/Type) Mark V. Sealey

Signature

Registration No.
(Attorney/Agent)

50,804

(Complete if applicable)

Telephone 408-765-7382

Date

July 27, 2004

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